Amendments to the Claims:

This following listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (previously presented) An apparatus for fabricating nanostructure-based devices on a workpiece comprising:

a stage for supporting the workpiece, wherein the workpiece includes multiple dies, each die having a catalyst on it;

a radiating-energy source, positioned above the stage to locally heat the catalyst on at least one die via simultaneously emitted multiple prongs of radiating energy; and

a feedstock delivery system for delivery of feedstock gas to the catalyst.

2. (previously presented) The apparatus of claim 1 wherein the radiating-energy source is a laser source, and the multiple prongs are multiple laser beams.

3. (previously presented) The apparatus of claim 2 wherein the multiple laser beams comprise a type selected from the set consisting of YAG, excimer, CO_2, argon, helium-neon, ruby, neodymium glass, semiconductor, and free electron.

4. (previously presented) The apparatus of claim 2 wherein the multiple laser beams originate from a single laser split by at least one beam splitter.

5. (previously presented) The apparatus of claim 2 wherein the multiple laser beams comprise at least ten laser beams.

6. (previously presented) The apparatus of claim 1 wherein the radiating-energy source includes at least one of a focused acoustic, focused radio frequency (RF), focused infrared (IR), or focused microwave source.

7. (previously presented) The apparatus of claim 1 wherein the apparatus is configured to permit the multiple prongs to be positioned and aligned so that all catalyst throughout the die that are desired for seeding growth are irradiated.

8. (currently amended) The apparatus of claim 1 wherein the apparatus is configured to permit the multiple prongs to be positioned and aligned so that all catalyst throughout [[the]] die that are desired for seeding growth are irradiated in multiple irradiating periods, in which a set of islands of catalyst irradiated in a first irradiating period is not identical to a set of islands of catalyst irradiated in a second irradiating period.

9. (currently amended) The apparatus of claim 1 wherein the apparatus is configured to permit the multiple prongs to be positioned and aligned so that all catalyst throughout [[the]] die that are desired for seeding growth are irradiated in multiple irradiating periods, in which each period of said multiple periods uses a different set of fabrication parameters.

10. (previously presented) The apparatus of claim 1 wherein the radiating-energy source includes a beam splitter, wherein a plurality of the multiple prongs are produced by the beam splitter from beams that number fewer than the plurality.

11. (previously presented) The apparatus of claim 1 wherein the feedstock delivery system is positionable at least in distance above the die, and in direction of gas flow toward the die.

12. (previously presented) The apparatus of claim 1 wherein the feedstock delivery system is positionable in X, Y, and Z directions.

13. (previously presented) The apparatus of claim 1 wherein the stage can be is configured to be capable of being translated or rotated relative to the radiating-energy source, whereby any die of the workpiece is capable of being positioned for exposure to said radiating-energy source.

14. (currently amended) The apparatus of claim 1 wherein the apparatus is configured to permit at least a portion of said radiating-energy source to be translated or rotated relative to the stage, whereby the multiple prongs are capable of being selectively positioned for radiating energy onto any given die of [[a]] the workpiece.

15. (currently amended) The apparatus of claim 1 wherein the stage includes a stage temperature-control unit for helping to control a temperature of [[a]] the workpiece.

16. (previously presented) The apparatus of claim 15 wherein the stage temperature-control unit cools the workpiece to a temperature in a range from an equilibrium room temperature to –250 degrees centigrade.

17. (previously presented) The apparatus of claim 15 wherein the stage temperature-control unit heats the workpiece to a temperature in a range from an equilibrium room temperature to 1200 degrees centigrade.

18. (previously presented) The apparatus of claim 1 wherein the apparatus is for fabricating carbon nanostructure-based devices.

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29. (previously presented) An apparatus comprising:

a stage, for supporting a workpiece having a plurality of work regions, wherein each work region will have a catalyst on it;

a temperature control unit, coupled to the stage, to maintain the stage and the workpiece at a first temperature;

a radiating energy source, above the stage, to locally heat the catalyst of a selected work region to a second temperature, above the first temperature, via multiple prongs of radiating energy; and

a feedstock delivery system for delivery of feedstock gas to the catalyst.

30. (previously presented) The apparatus of claim 29 wherein the multiple prongs of radiating energy are simultaneously emitted by the radiating energy source.

31. (previously presented) The apparatus of claim 29 wherein the temperature control unit heats the stage to the first temperature.

32. (previously presented) The apparatus of claim 29 wherein the temperature control unit cools the stage to the first temperature.

33. (previously presented) The apparatus of claim 29 wherein the selected work region will comprise a plurality of nanostructure devices.

34. (previously presented) The apparatus of claim 29 wherein the radiating energy source comprises focused infrared radiation.

35. (previously presented) The apparatus of claim 29 wherein the radiating energy source comprises a laser.

36. (previously presented) The apparatus of claim 29 further comprising:
a temperature sensor, coupled to the stage, to monitor a temperature of the workpiece.

37. (currently amended) The apparatus of claim 29 wherein [[a]] an output nozzle of the feedstock delivery system is movable to position above the stage.

38. (previously presented) The apparatus of claim 29 wherein the feedstock delivery system comprises a heating element to heat the feedstock gas to a third temperature before exposing the catalyst to the feedstock gas.

39. (previously presented) The apparatus of claim 29 wherein work regions other than the selected work region are at the first temperature.

40. (previously presented) The apparatus of claim 29 wherein in the selected work region, a plurality of nanotube structures will be formed.

41. (previously presented) The apparatus of claim 40 wherein in work regions other than the selected work region, nanotube structures are not formed.

42. (previously presented) The apparatus of claim 29 wherein in the selected work region, a plurality of nanowire structures will be formed.

43. (previously presented) The apparatus of claim 42 wherein in work regions other than the selected work region, nanowire structures are not formed.

44. (previously presented) The apparatus of claim 29 wherein the first and second temperatures are set independently of each other.

45. (previously presented) The apparatus of claim 38 wherein the third temperature is different from the first and second temperatures.

46. (previously presented) The apparatus of claim 38 wherein the first, second, and third temperatures are set independently of each other.

47. (previously presented) The apparatus of claim 29 wherein there are more than ten prongs of radiating energy.

48. (previously presented) The apparatus of claim 29 wherein there are more than fifty prongs of radiating energy.

49. (previously presented) The apparatus of claim 29 wherein there are more than one hundred prongs of radiating energy.

50. (previously presented) The apparatus of claim 29 further comprising:

an electric field generator, having an adjustable position relative to the stage, whereby the electric field generated by the generator will influence a direction of nanostructure growth in the selected work region.

51. (previously presented) The apparatus of claim 29 further comprising:

a magnetic field generator, having an adjustable position relative to the stage, whereby the magnetic field generated by the generator will influence a direction of nanostructure growth in the selected work region.

52. (previously presented) The apparatus of claim 29 wherein the multiple prongs of radiating energy are parallel to each other.

53. (previously presented) The apparatus of claim 29 wherein the multiple prongs of radiating energy are not parallel to each other.

54. (previously presented) The apparatus of claim 52 wherein the multiple prongs of radiating energy are perpendicular to a surface of the selected work region.

55. (previously presented) The apparatus of claim 52 wherein the multiple prongs of radiating energy are at an angle other than perpendicular to a surface of the selected work region.